



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/961,205	09/24/2001	Goro Tamai	GP-300567	6870

7590 09/30/2004

CHRISTOPHER DEVRIES

General Motors Corporation

Legal Staff

P.O. Box 300, Mail Code 482-C23-B21

Detroit, MI 48265-3000

EXAMINER

AVERY, BRIDGET D

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/961,205

Applicant(s)

TAMAI ET AL.

Examiner

Bridget Avery

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. The response filed by applicant on June 25, 2004 is acknowledged and has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 25-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakatsu (US Patent 4,335,429).

Kawakatsu teaches

a propulsion system controller for use in a hybrid vehicle including: a motor/generator (5, 7) for providing starting force to an internal combustion engine (1) in a first mode of operation and for generating an electrical charge in a second mode of operation (as described in column 6, lines 50-63 and column 21, lines 60-64); a first operating system, the first operating system capable of varying the prime pulse to an internal combustion engine (1) and the starting force applied to the internal combustion engine (150) by the motor/generator (200) (as described in column 8, lines 43-55 and column 21, lines 58-67), the operating system capable of varying the starting force and the prime pulse according to engine coolant temperature and battery state-of-charge (see column 11,

lines 42-68 and column 12, lines 1-20); a second operating system, the second operating system varying the state of operation of the motor/generator (5, 7) during a starting sequence of the internal combustion engine (1), the first operating system and the second operating system instructing the motor/generator (5, 7) to operate in between the first and the second modes of operation (between the starting mode and the generating mode); a third operating system, the third operating system varying a degree of electric power being used to drive the vehicle, the degree of electric power corresponding to sensed vehicle operating conditions; a means (see column 7, lines 39-68) for sensing the state-of-charge of an electric storage medium (23), the means for sensing state-of-charge of the electric storage medium (23) capable of being operated by the first operating system; and a means (see column 6, lines 33-44) for sensing the temperature of an engine coolant of an internal combustion engine (1), the means for sensing the temperature of the engine coolant capable of being operated by the first operating system. The method of varying the state of propulsion and the method of controlling a hybrid powertrain, which includes: determining if an engine starting command has been requested; sensing the state-of-charge of an electric storage medium; sensing the temperature of an engine coolant of an internal combustion engine; sensing the temperature of the electric storage medium; determining if a fault condition is present; sensing the operating condition of a motor/generator; controlling the motor/generator operation based upon the state-of-charge and the temperature of the internal combustion engine; varying the starting speed of the motor/generator in the first mode in response to the state of charge of the electric storage medium; varying a

Art Unit: 3618

prime pulse to the internal combustion engine in response to the state of charge of the electric storage medium, and controlling the transmission based upon the operations of the motor/generator is also taught by Kawakatsu. See column 9, lines 13-67 and column 11, lines 42-67.

Response to Arguments


3. Applicant's arguments with respect to claims 25-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number 703-308-2086.


Avery

September 24, 2004


CHRISTOPHER P. ELLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600